isolated nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule is a shortened sequence as compared to that of SEQ ID No. 1.; (b) SEQ ID No. 1; and (c) SEQ ID No. 2; and (ii) optionally substances for analytical detection processes.

- 27. (Amended) A kit for the detection of strains of *Pseudomonas aeruginosa*, comprising: (i) one or more nucleic acid molecules selected from the group consisting of: (a) an isolated nucleic acid molecule comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule is a shortened sequence compared to that of SEQ ID No. 1; (b) SEQ ID No. 1; and (c) SEQ ID No. 2; and (ii) optionally substances for analytical detection processes.
- 28. (Amended) A kit for the detection of strains of *Pseudomonas aeruginosa*, comprising: (i) one or more nucleic acid molecules selected from the group consisting of: (a) An isolated nucleic acid molecule comprising at least 10 contiguous nucleotides wherein said molecule corresponds in 9 out of 10 contiguous nucleotides to a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule is a shortened sequence compared to that of SEQ ID No. 1; (b) SEQ ID No. 1; and (c) SEQ ID No. 2; and (ii) optionally substances for analytical detection processes.



- 29. (Amended) A kit for the detection of strains of *Pseudomonas aeruginosa*, comprising: (i) one or more nucleic acid molecules selected from the group consisting of: (a) An isolated nucleic acid molecule comprising at least 10 contiguous nucleotides wherein said molecule corresponds in 8 out of 10 contiguous nucleotides to a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule is a shortened sequence compared to that of SEQ ID No. 1; (b) SEQ ID No. 1; and (c) SEQ ID No. 2, and (ii) optionally substances for analytical detection processes.
- 30. (Amended) An isolated nucleic acid molecule as a component of a kit according to claim 26, comprising a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule is a shortened sequence as compared to that of SEQ ID No. 1.
- 31. (Amended) The isolated nucleic acid molecule according to claim 30, wherein the nucleic acid sequence contains 10 to not more nucleotides than SEQ ID NO. 1.
- 32. (Amended) The isolated nucleic acid molecule according to claim 30, wherein the nucleic acid sequence contains 15 to 30 nucleotides.
- 33. (Amended) An isolated nucleic acid molecule as a component of a kit according to claim 27, comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5

and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule is a shortened sequence compared to that of SEQ ID No. 1.

- 34. (Amended) The isolated nucleic acid molecule according to claim 33, wherein the nucleic acid sequence contains 10 to not more nucleotides than SEQ ID NO. 1.
- 35. (Amended) The isolated nucleic acid molecule according to claim 33, wherein the nucleic acid sequence contains 15 to 30 nucleotides.
- 36. (Amended) An isolated nucleic acid molecule as a component of a kit according to claim 28, comprising at least 10 contiguous nucleotides wherein said molecule corresponds in 9 out of 10 contiguous nucleotides to a nucleic acid sequence selected from the group consisting of SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises is a shortened sequence compared to that of SEQ ID No. 1.
- 37. (Amended) The isolated nucleic acid molecule according to claim 36, wherein the nucleic acid sequence contains 10 to not more nucleotides than SEQ ID NO. 1.
- 39. (Amended) An isolated nucleic acid molecule as a component of a kit according to claim 29, comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises



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a shorter sequence than that of SEQ ID No. 1 and said 10 contiguous nucleotides correspond to said nucleic acid molecule in 8 out of 10 contiguous nucleotides.

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- 40. (Amended) The isolated nucleic acid molecule according to claim 39, wherein the nucleic acid sequence contains 10 to not more nucleotides than SEQ ID NO. 1.
- 42. (Amended) An isolated nucleic acid molecule as a component of a kit according to claim 45, comprising at least 10 contiguous nucleotides, wherein said nucleic acid molecule is a shortened sequence compared to that of SEQ ID No. 1 and said 10 contiguous nucleotides are at least 90% homologous to a nucleic acid sequence selected from the group consisting of SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 4 and SEQ ID No. 5 and said nucleic acid sequences allow for the detection of bacteria of the *Pseudomonas* genus by means of nucleic acid hybridisation or amplification.
- 43. (Amended) The isolated nucleic acid molecule according to claim 42, wherein the nucleic acid sequence contains 10 to not more nucleotides than SEQ ID NO. 1.
- 44. (Amended) The isolated nucleic acid molecule according to claim 42, wherein the nucleic acid sequence contains 15 to 30 nucleotides.

Kindly add new claim 45 to read as follows:

- 45. A kit for the detection of strains of *Pseudomonas aeruginosa*, comprising:
- (i) one or more nucleic acid molecules selected from the group consisting of: (a) an isolated nucleic acid molecule comprising at least 10 contiguous nucleotides wherein said at least 10



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contiguous nucleotides are at least 90% homologous to a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule is a shortened sequence compared to that of SEQ ID NO. 1; (b) SEQ ID NO. 1; and (c) SEQ ID NO. 2; and (ii) optionally substances for analytical detection processes. --